

DOCUMENT RESUME

ED 246 615

EC 162 867

AUTHOR Lee, Marjorie W.
TITLE Does It Make a Difference? The Influence of Short-term Inservice Training vs On-going Inservice Training on the Attitudes about the Handicapped, the Knowledge of PL 94-142, and Teaching Behaviors of ECE Teachers.
PUB DATE Apr 84
NOTE 23p.; Paper presented at the Annual Convention of the Council for Exceptional Children (62nd, Washington, DC, April 23-27, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Disabilities; *Inservice Teacher Education; *Knowledge Level; *Preschool Education; *Special Education; *Teacher Attitudes; *Teacher Workshops; *Teaching Methods

ABSTRACT

The study compared the effects of on-going versus short-term training on attitudes, knowledge, and practice of two groups of 40 early childhood teachers. A review of the literature suggested the superiority of the on-going training approach. It was hypothesized that preschool teachers receiving on-going training would have more positive attitudes about mainstreaming, and more knowledge of the law (specifically, P.L. 94-142, the Education For All Handicapped Children Act), and would demonstrate more frequent use of appropriate teaching behaviors than preschool teachers receiving short term training. Half of the preschool teachers worked with Head Start where they received on-going training and half in day care programs where they received short-term workshop training. Results indicated that the on-going training group had more positive attitudes, a greater knowledge of the law, and more positive teaching behaviors. (DB)

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RESEARCH REPORT

FOR

CEC'S 62nd ANNUAL CONVENTION

WASHINGTON, D.C.

APRIL 23-27, 1984

MARJORIE W. LEE, Ph.D.

TITLE: Does it make a difference? The influence of short-term inservice training VS on-going inservice training on the attitudes about the handicapped, the knowledge of PL 94-142, and teaching behaviors of ECE teachers.

For the past 16 years the focus of my work has been teacher preparation and inservice training relative to Early Childhood Education. This interest naturally led me to look at the routes through which practitioners enter into the ECE field. There are at least three entry-routes into this profession, and each route has its own type and level of preparation. For example, one might earn a college degree and become certified to teach young children. Another person might be hired with a high school diploma and given on-the-job training as well as on-going regular inservice, but still another person might be hired based on some personality attributes and personal experience such as babysitting or having reared his/her own children. This third type of preschool teacher as well as either of the other two types may or may not receive training subsequent to being hired as a preschool teacher.

While each of these entry routes still exist in the field, the trend is toward the requirement of training prior to being hired to teach. This trend also extends to incumbent teachers

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In that most uncertified teachers must acquire training within a set period in order to retain their positions. Hence, many program administrators and preschool teachers are rushing to identify trainers and/or institutions to assist in this critical matter. Most seem to seek training that will yield certification for a particular level of ECE or for teaching a particular type of child.

At the same time that preschool teachers are attempting to secure certification to teach young children, many of them are also required to gain competence to care for both handicapped and non-handicapped children in the same classroom. Few would disagree with this requirement because of its certain positive influence on quality childcare. However, mandates such as this place financial hardships on both the individual preschool teacher and childcare programs that finance staff development. The problem of finances directs much of the training given to ECE teachers toward participation in short-term workshops regardless of an individual teacher's training needs, learning style or background experience. This occurs even though Head Start, the largest and most comprehensive ECE program, has demonstrated that the OGT training model might be more effective for the preparation of incumbent, uncertified preschool teachers. The difference is in the amount of money available for staff training in Head Start.

Head Start as a federally-funded program, has a budgeted category of funds for staff development and technical assistance. Through a variety of training strategies and settings, Head Start teachers are given competency-based training on an on-going basis.

Head Start programs often follow-up training with supervised practice in the classrooms and also provide financial assistance to many teachers who are pursuing academic degrees in ECE. Some types of preschool programs have had successful results with short-term training for their teachers who seek certification. However, it is insufficient funds that directs many programs to provide short-term training although it is clear that their staff require more comprehensive and lengthy training.

Let's look more closely at what a review of the literature reveals about both of these training models (on-going training and short-term training). Head Start will be used to represent the on-going model and day care to represent the short-term model. In Head Start, caregivers must come from the SES level of the children served and they must reflect the children's ethnic group affiliations. The minimum schooling for these practitioners is a high school diploma for teacher assistants and an ECE degree or CDA for teachers. All classroom caregivers are provided with extensive training on a regular basis to develop or maintain competent childcare-givers. Training and support are also given to assist uncertified staff in meeting certification requirements within or outside of an academic setting. In 1979, Anne O'Keefe concluded from her extensive review of Head Start research covering the period from 1969-1975, that Head Start has had an "overwhelmingly positive" impact on the attitudes and behavior of caregivers of young children. These positive results are attributed to the on-going training Head Start provides for parents and staff members.

Head Start's inservice success also holds true for training relative to the care of handicapped children. In a study conducted

by Applied Management Sciences, Inc. (1978). Head Start was found to have teachers with more experience in providing services to handicapped children than teachers in non-Head Start programs. These teachers were more favorably oriented toward the practice of mainstreaming and perceived fewer constraints in implementing a mainstreaming program than did teachers in non-Head Start programs. Head Start teachers also expressed beliefs that children learn by doing and that all children should be treated equal while non-Head Start teachers reported that children can learn passively and were less likely to believe in equal treatment of all children.

The National Head Start Office reported, in its Seventh Annual Report to Congress (February 1980), that "The quality of Head Start services to handicapped children hinges on ... staff capability. Therefore, priority has been given to staff training..." The report credits much of Head Start's achievement to the successful training provided by the Resource Access Projects --- RAP (a network of training and technical assistance projects that support Head Start efforts for the handicapped).

In the Ninth Annual Report to Congress...(1983), Head Start reports that during 1980-81 in its effort to insure appropriate and high quality educational and developmental experiences for handicapped children, some 35,415 staff members participated in inservice training. A closer look at this report shows that:

FOR PRESERVICE TRAINING

60.9% of the programs reported an average of 1-9 hrs.,
27.9% reported 10-29 hours; and
10.6% reported 30 or more hours.

FOR INSERVICE TRAINING

47.8% of the programs reported on an average of 1-9 hrs;

38.6% reported 10-29 hours; and

13.3% reported 30 or more hours.

In addition, 1,216 (68.9%) staff members received technical assistance for planning or implementing training about handicapped children from other agencies such as special purpose agencies, i.e., Resource Access Projects and private consultants.

Levine (1978) reports an American Federation of Teachers conclusion as "...many states now require that day care specialists have only a high school education or in some cases even less". Some localities require day care teachers to have eighteen college credits beyond the high school diploma. While these credits must be in ECE, these teachers may or may not have training in methods of teaching young children and may not be competent in caring for children following meeting these meager requirements. In spite of the inadequate requirements for certification to teach young children, many day care teachers have academic degrees or a CDA credential they have earned on their own.

The majority of the day care programs are privately-funded-and-operated. As such, they have small budgets or no funds available for inservice training. While staff might meet regularly with the director regarding the program, for the most part, inservice training in center-based programs serving low-to-middle income families, consist of participation in an average of two to three formal workshops a year. Ruopp et al. (1979) reported "that center caregivers with training relevant to young children

delivered better care with somewhat superior developmental effects for children. Stallings (1981) reported on the National Day Care Home Study that "formal education per se seems to have little effect on caregiver and child behavior" but "the results of the investigation of sponsors in networks suggest that some form of training in the delivery of day care might be useful".

Some day care programs provide informal inservice on-site on a regular basis, and a small percent of these non-Head Start caregivers are invited to participate in special Head Start (including RAP) training activities as well as in other special agency or professional organization's training. However, there is usually little if any in-classroom follow-up training or on-site assistance in implementing the new ideas and skills. Day Caregivers are left to translate their inservice content into practice as best they can.

Like Head Start, some day care programs care for handicapped children in classrooms along with non-handicapped children. Day Care programs, especially some publically-funded programs, are beginning to require their childcare-givers to mainstream as they teach. Inservice training designed to prepare teachers for this new effort is being handled in the same way as is regular staff development, with short-term training.

It is my contention that on-going training that is designed to meet the professional needs of the staff at a particular center or to use a particular instructional approach, and is followed-up with in-classroom technical assistance, will better prepare practitioners to care for young children than will periodic,

short-term training. The assumption is that on-going training will have more influence on teachers' attitudes, knowledge and teaching behaviors than does short-term training without follow-up.

Interest in this issue led me to conduct an investigation of the influence of both on-going training and short-term training, provided for staff, on three aspects of their practice. The general hypothesis for this study was: "Preschool teachers who have on-going training (OGT) relative to caring for children with handicaps will have more positive attitudes about mainstreaming, more knowledge of the Law (PL 94-142), and will report more frequent use of appropriate teaching behaviors than will preschool teachers who have had only short-term training (STT) regarding the care of handicapped children." The three sub-hypotheses were as follows:

- 1) Preschool teachers (PT) who have OGT will have more positive attitudes about mainstreaming than will PT who have STT.
- 2) PT who have OGT will have more knowledge about PL 94-142 than will PT who have STT.
- 3) PT who have OGT will report more frequent use of appropriate teaching behaviors than will PT who have STT.

SUBJECTS

Eighty preschool caregivers in a large eastern city were the subjects for this study. Forty subjects were day caregivers who expressed an interest in learning how to care for handicapped children. These individuals became that segment of the sample known as the accidental sample (so identified because the investigator just happened upon these individuals during imple-

mentation of some other work). Another forty subjects, the Head Start segment, were randomly chosen as the quota sample from among participants in another study conducted in 1982 by Ms. Senobia Crawford.

These two types of non-probability samples were combined to form a quasi-probability sample so that the respondents' attitudes, specific knowledge and reported teaching behaviors, following training relative to teaching in mainstream classrooms, could be assessed. Data from this type of sample can be treated with statistical tests as if they were from a random sample (Selltitz, et al; 1959). Thus, generalizations can be made relative to childcare-givers in other eastern, urban areas of the U.S. Replications are need however, in order to generalize to childcare-givers in other locations.

All subjects worked in center-based programs that serve predominately low-income to lower-middle-income families and cared for children 3-5 years old in mainstream classrooms.

TRANSPARANCY #1
mainstream definition

Thirty-eight percent of the day caregivers have taught in a preschool classroom for no more than one year or less, while 15% of them had taught in ECE for more than 10 years. Eighty-eight percent of the day caregivers had one year or less of experience in mainstream classrooms. Of these 40 child caregivers, 10 teachers had bachelors degrees and seven individuals (3 teachers; 4 aides)

are currently working on a bachelors degree; one aide had a CDA credential. Twenty-five caregivers had had some training regarding care of handicapped children.

Most Head Start aides had a CDA and all of the teachers had a bachelors degree; many teachers also had a masters degree. All of these forty caregivers have taught for at least two years and most for ten years or more. Everyone in this group had had training in special education and in mainstreaming. Most Head Start caregivers had taught in mainstream classrooms between two to six years.

Each participant in this study completed a questionnaire, "Mainstreaming: A Teacher Training Survey," which was developed by Senobia Crawford, an alumnus of Howard University's ECE Graduate Program. Under the guidance of two ECE faculty members at Howard, Ms. Crawford developed this instrument with the following five parts:

— TRANSPARANCY #2 —
Questionnaire
— —

As you see sections II and IV of the questionnaire were developed using a Likert-type scale while section III used a "Yes- Don't Know- No" format. Section I of the questionnaire requested demographic information that generated data regarding teaching experience and inservice training participation.

It was an objective to summarize points across items within each subsection of the instrument, hence, it was necessary to be certain that items within a subsection were sufficiently similar in intensity. Several ECE/Special Education university faculty

members rated each item on a ten point intensity scale. Only items receiving an intensity rating of from 4 - 6 were used in the questionnaire.

Two instruments were adapted to construct this questionnaire: 1) the Larrives and Cook (1979) attitude scale (for the teacher attitudes section) which has a reliability coefficient of .92 as determined by the Spearman-Brown prophecy formula, and 2) the Howard University Needs Assessment Questionnaire which was used to assess faculty regarding knowledge and behavior relative to the mandates of PL 94-142. The latter instrument was adapted from the Hall, George and Rutherford (1979) Stages of Concern Questionnaire which has an established reliability of .84 as verified by the Ebel (1951) technique and programmed by Veldman (1967). Thus, it retains their reliability assurance. In addition, this mainstreaming survey was field-tested with 15 educators for clarity of statements and directions before being administered in the current study.

NOTE: Refer to Transparency #2 to point out the number of items in each section and a sample item for these sections.

ADMINISTRATION OF THE QUESTIONNAIRE

All Head Start subjects were given the questionnaire during their May 1982 staff meeting. Most questionnaires were administered by the developer of the instrument and the rest were administered by the program center directors and then forwarded to the investigator. Seventeen (17) day caregivers completed the questionnaires within a workshop on mainstreaming and the other twenty-three (23)

day care subjects agreed to respond to the questionnaires in scheduled meetings at their centers.

COMPLETION OF THE QUESTIONNAIRES

In each of the data gathering situations, the person who disseminated the questionnaires also supervised their completions in a group setting. Thus, the administration was done with this same person reading the directions, reading each statement and then allowing time for each participant to respond as desired.

RESULTS

Each section of the questionnaire produced a mean rating for each subject relative to the variable being assessed. Thus, each subject had a mean rating score for teacher Attitudes, Knowledge of the Law, and Teaching Behaviors.

Two statistical procedures were used to analyze the data. The t-Test was used to compare item responses on each variable in order to see if there was a difference between the two groups (OGT vs STT) in their responses to the items, and the Pearson Product-Moment Correlation was used to analyze the relationships among the three variables within each training group type. The results which follow report findings from the application of the t-Test and the Pearson Correlation technique.

The following significance levels were used in interpreting the results. The .01 level of significance was used to interpret the t-Test results for each of the three dependent variables. Both the .05 and .01 levels of significance were employed to interpret the Pearson-Product-Moment Correlations among the three variables.

The general finding is that at the .01 level of significance, there is a highly significant difference (in favor of OGT) between the impact of OGT and STT on preschool teachers' attitudes about their teaching behaviors.

Findings resulting from the t-Test analyses for the three subhypotheses supported that $X_{OGT} \neq X_{STT}$ for each variable. Therefore, the null hypotheses were rejected at the .01 level of significance for the three variables. The findings for each variable was as follows:

TRANSPARANCY #3
t-Test findings

Discussion

It was predicted that preschool teachers who had on-going training would 1) have more positive attitudes about mainstreaming, 2) have more knowledge of the Law (PL 94-142), and 3) report more positive teaching behaviors than would preschool teachers who had short-term training. These predictions were supported by the data in as much as the differences between the means of the two groups were significant for the three variables.

Furthermore, the data substantiated that these differences between OGT and STT are related to the type of training each group received.

TRANSPARANCY #4
Correlations

Figure 1 shows the results of Pearson Correlations regarding the relationships among the variables, and the type of training received by both the STT and OGT groups. The results were interpreted at d.f. = 38 and at both the .01 ($r = .31$) level of significance and the .05 ($r = .40$) level of significance.

For the OGT group, there were significant correlations between Teacher Attitudes and Teaching Behaviors ($p < .01$) and also between Knowledge of the Law -- PL 94-142 and Teaching Behaviors ($p < .05$).

Conclusion

OGT contributed to a significant positive relationship between Teacher Attitudes and Teaching Behaviors. This relationship was in the nature of a more positive attitude being associated with more positive teaching behaviors. This was also true of the relationship between Teaching Behaviors and Knowledge of the Law whereby teachers' reports of having more knowledge of the law indicated more positive and desirable teaching behaviors. These results were not obtained for the STT group, where none of the relationships were significantly different from zero.

Summary

The OGT advantages for trainees as stated by McCollum (1982) were supported in this study. The OGT's longer time frame gave time for practice in real situations over time, time for practice of the new knowledge and new behaviors, as well as time for development of the new attitudes concurrent with the training experiences. These features of OGT were verified as having more impact on preschool teachers than did the STT sessions.

The longer time period as well as the inclusion of on-the-job practice for the Head Start group address the salient principles which are based on findings reported by Harris and his colleagues (1969). In keeping with the spirit of these principles, Head Start training provides time for the internalization of knowledge, time for the acquisition of skill competence and time for attitude change which is complex and thus, requires a longer time period than either of the other two training benefits (behavior change and acquisition of information). The results of this study support these principles in that the longer, more regularly scheduled training (OGT) model did have a positive influence on teacher attitudes and teaching behaviors. The STT (shorter time and fewer sessions) model was not related to the variables.

Several implications emerge from these findings and they are recommended for incorporation into training efforts for child caregivers, especially day caregivers who have not met certification requirements, have only completed high school, and need competence in caring for handicapped children in regular classrooms.

Implication

1. Since many day caregivers have profiles similar to many Head Start caregivers prior to OGT activities, this training model is likely to also be effective in influencing the professional development of day care practitioners. Thus, regularly scheduled workshops with guided in-class follow-up, training with a competency-based focus, and descriptions of and techniques for teaching children with the various handicapping conditions should influence the aspects

of teaching for day caregivers that were investigated in the current study.

2. Although Head Start caregivers previously expressed a need for more attention to be given to the assurance that training information is appropriate for and related to effecting changes in their attitudes, the current sample of caregivers reported information supporting that their attitudes about caring for handicapped children positively influences their teaching behaviors. Since Head Start caregivers develop professionally with OGT even though they still have some training needs, other similar non-Head Start caregivers might also benefit from training similar to that provided by RAP and other on-going trainers used by Head Start.
3. Information provided over time and in conjunction with guided in-class assistance is likely to effect the teaching behaviors of child caregivers who need training in caring for handicapped young children.
4. Caregivers who must learn a new set of teaching skills relative to an unfamiliar topic can do so better with OGT than with STT. Therefore, OGT models should be employed to prepare day caregivers to care for handicapped children in mainstream classrooms.

While these findings and conclusions are judged as representative of caregivers in the urban area where this investigation was conducted, it is predicted that these findings are also true of day care and Head Start practitioners in other, large, urban areas and probably, in other aggregate formation of families such as in towns or smaller cities. Based on the current findings, educators are urged to implement on-going training in their teacher development programs, especially those for caregivers who will work in mainstream classrooms. Investigators are encouraged to replicate

this study using other populations in other locations to find out if these findings hold across regions.

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MAINSTREAMING

MAINSTREAMING IN THIS STUDY REFERS TO EDUCATING HANDICAPPED CHILDREN AND NON-HANDICAPPED CHILDREN IN THE SAME ENVIRONMENT. IT IS MORE THAN PHYSICALLY BEING TOGETHER FOR INSTRUCTION. IT MEANS THAT BOTH HANDICAPPED AND NON-HANDICAPPED CHILDREN WILL RECEIVE HIGH QUALITY EDUCATIONAL AND DEVELOPMENTAL EXPERIENCES. THIS REQUIRES STAFF THAT CAN PROVIDE "EXPERIENCES MOST LIKELY TO ENSURE THAT HANDICAPPED CHILDREN CAN REALIZE MAXIMUM POTENTIAL FOR FULL PARTICIPATION IN SOCIETY AND INDEPENDENCE OF FUNCTIONING," (SAFFORD AND ROSEN, 1981).

MAINSTREAMING: A TEACHER TRAINING SURVEY

BY: SENOBIA CRAWFORD

THE SAMPLES LISTED BELOW ARE REPRESENTATIVE OF THE QUESTIONNAIRE'S THREE CONTENT SUBSECTIONS:

SECTION II (14 ITEMS)

TEACHER ATTITUDES (CIRCLE THE RESPONSE THAT BEST DESCRIBES YOUR OPINION).

MAINSTREAMING OFFERS MIXED GROUP

INTERACTIONS WHICH WILL FOSTER

SA A U D SD*

UNDERSTANDING AND ACCEPTANCE

OF DIFFERENCES.

*THESE SYMBOLS REPRESENT:

SA = STRONGLY AGREE A = AGREE U = UNDECIDED

D = DISAGREE

SD = STRONGLY DISAGREE

SECTION III (ONE ITEM ON PL 93-644 AND SEVEN ITEMS ON PL 94-142)

KNOWLEDGE OF THE LAW (CIRCLE THE RESPONSE THAT BEST INDICATES YOUR UNDERSTANDING OF PL 94-142 AND PL 93-644).

PL 94-142, THE EDUCATION FOR ALL HANDICAPPED CHILDREN ACT OF 1975, MANDATES THE FOLLOWING RESPONSIBILITIES RELATIVE TO SERVING THE HANDICAPPED CHILD:

EDUCATIONAL INSTRUCTION IS TO BE PROVIDED IN THE LEAST RESTRICTIVE ENVIRONMENT

DON'T
YES KNOW NO

SECTION IV (12 ITEMS)

TEACHING BEHAVIORS (CIRCLE THE RESPONSE WHICH BEST DESCRIBES THE EXTENT TO WHICH YOU PERFORM THE FOLLOWING TEACHING BEHAVIORS.)

WHILE TEACHING HANDICAPPED OR SPECIAL

NEEDS CHILDREN, I GEAR MY INSTRUCTION

AO VFO OO SO NO⁺

TOWARD STRENGTHENING THEIR WEAK AREAS.

20

⁺AO=ALWAYS OCCUR VFO=VERY FREQUENTLY OCCUR OO=OCCASSIONALLY OCCURS
SO=SELDOM OCCURS NO=NEVER OCCURS

FINDINGS FROM T-TEST ANALYSES

FINDING: $\bar{X}_{OGT} \neq \bar{X}_{STT}$ FOR EACH VARIABLE.

THEREFORE, THE NULL HYPOTHESES WERE REJECTED AT THE
.01 LEVEL OF SIGNIFICANCE.

THE FINDINGS FOR EACH VARIABLE WAS AS FOLLOWS:

1. FOR TEACHER ATTITUDES, THE T-RATIO OF 2.538 ($p < .01$) WAS SIGNIFICANT IN FAVOR OF THE OGT GROUP, WHICH HAD A MEAN OF 2.511 WHILE THE STT MEAN WAS 2.748. SINCE A LOW MEAN RATING ON THIS SCALE REPRESENTS A POSITIVE ATTITUDE, IT IS APPARENT THAT THE OGT GROUP HAD THE MORE POSITIVE ATTITUDES.
2. FOR KNOWLEDGE OF THE LAW, THE T-RATIO OF 2.5952 ($p < .01$) WAS SIGNIFICANT IN FAVOR OF THE OGT GROUP, WHICH HAD A MEAN OF 1.24; STT MEAN WAS 1.6695. AGAIN, A LOW MEAN RATING ON THIS SCALE REPRESENTS GREATER KNOWLEDGE OF THE LAW.
3. FOR TEACHING BEHAVIORS, THE T-RATIO OF 2.2828 ($p < .01$) WAS SIGNIFICANT IN FAVOR OF THE OGT GROUP, WHICH HAD A MEAN OF 1.606 WHILE THE STT MEAN WAS 2.0923. AS WAS THE CASE PREVIOUSLY, A LOW MEAN RATING ON THIS SCALE REPRESENTS POSITIVE TEACHING BEHAVIORS.

STT GROUP		
TEACHER ATTITUDES	KNOWLEDGE OF THE LAW	TEACHING BEHAVIORS
A ₁	A ₂	A ₃
A ₁	.13 (NS)	.20 (NS)
A ₂	.22 (NS)	.18 (NS)
A ₃	.41 (P < .01)	.33 (P < .05)

FIGURE 1. SUMMARY OF CORRELATION RESULTS FOR STT AND OGT GROUPS SHOWING RELATIONSHIPS AMONG TEACHER ATTITUDES, KNOWLEDGE OF THE LAW, AND TEACHING BEHAVIORS. IT CAN BE SEEN THAT NONE OF THE CORRELATIONS AMONG THE THREE VARIABLES WERE SIGNIFICANT FOR THE STT GROUP, WHILE TWO VARIABLES WERE SIGNIFICANT FOR THE OGT GROUP.